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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,735	03/01/2002	Mikio Hayashihara	220289US2S	8417

22850 7590 04/07/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,735

Applicant(s)

HAYASHIHARA, MIKIO

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 3-5, 8-10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date attached.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I of claims 1-5 in the reply filed on 8/13/04 is acknowledged. The traversal is on the ground(s) that the search would not be a serious burden to the Examiner. This is found persuasive because after reviewing claims 6-10 again, the Examiner agrees that a radio apparatus contains the same limitations as cited in claims 1-5; therefore, the Examiner removes the election/restriction as noted in the previous action and examines all of the claims 1-10 as disclosed below.

Claim Rejections - 35 USC 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakanishi et al. (U.S. Patent No. 5,182,527).

Regarding claim 1, Nakanishi discloses "a gain control circuit" (Fig. 1), comprising:

a transmission power amplifier which amplifies a transmission signal to a predetermined level (Fig. 1, item 30 for a power amplifier and predefined VA1 and VA2 using variable voltage sources for pre-amplifying the signals at predetermined level (col. 5/lines 39-62);

an adjacent channel leak power ratio monitor which finds a ratio of a distortion element corresponding to adjacent channel leak power to a main element from an output signal of the

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transmission power amplifier, and outputs the found ratio as an ACPR monitor value (Fig. 1, at Voltage Monitor VM110, a ratio of a distortion element occurs as the change of variable voltage sources and at voltage divider 52, the ratio is changed accordingly, see col. 9/lines 30-46 & col. 13/lines 24-41);

a power supply control section which variably controls power supply to the transmission power amplifier with use of the ACPR monitor value supplied from the adjacent channel leak power ratio monitor (Fig. 1/item 60 for a power supply controls the transmission power amplifier 30 using the VM monitor value 110 for wireless transmitter 10, see col. 6/line 45-col. 7/line 26); and

a transmission signal level variable section which varies a level of the transmission signal by controlling a gain of a transmission signal path on the basis of a transmission level monitor value supplied from the adjacent channel leak power ratio monitor (col. 7/lines 34-50 as transmission signal level is adjusting in a variable manner and output based on the variable voltage sources and the power level control 60).

As for claim 2, Nakanishi further discloses “wherein the transmission signal level variable section includes: variable gain amplifier provided in the transmission signal path; and a comparator which compares the transmission level monitor value supplied from the adjacent channel leak power ratio monitor to a gain setting value supplied from a base band signal processing section, and supplies the result of the comparison performed through the comparator to the variable gain amplifier as a variable gain control signal”, i.e., variable gain amplifiers at 32, 34 with VF 36, wherein the VF 36 is supplied from the processing section 58 where the VM 110 and voltage divider 52 supplied for channel leak power monitor as explained earlier, and a

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comparator 56 compares between the two values before submitted back to power amplifier 30 for modifying the transmission power levels before then to power transmission line 40 for signal transmission, see col. 6/line 10 to col. 7/line 50).

Regarding claims 6-7, these claims for “a radio communication terminal comprising a radio transmission section”, wherein the radio transmission section comprising the gain control circuit as cited earlier in claims 1-2, are rejected for the reasons given in the scope of claims 1-2 as discussed in details above.

Allowable Subject Matter

4. Claims 3-5 and 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 3 and 8, Nakanishi does not disclose the gain control circuit AND further including the step of “wherein the leak power ratio monitor comprises: a squaring circuit which squares an output signal of the transmission power amplifier; a first band path filter which extracts a distortion element corresponding to the adjacent channel leak power from an output signal of the squaring circuit; a second band path filter which extracts an element corresponding to a main part of the output signal of the squaring circuit; and a adjacent channel subtracter which performs a subtraction process between an output of the first band path filter and an output of the second band path filter”. Dependent claims 4-5 and 9-10 are allowable based at least on this feature.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ohno et al, Oberholtzer et al., and Duncan et al. (in PTO 892 attached) disclose systems related to wireless transmitter with adjustable power signal levels.

6. **Any response to this action should be mailed to:**
Commissioner of Patents and Trademarks
Washington, D.C. 20231

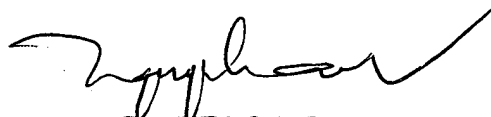
or faxed to: (703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tony T. Nguyen
Art Unit 2685
March 28, 2005


TONY T. NGUYEN
PATENT EXAMINER